

Amendments to the Specification

IN THE SPECIFICATION:

On page 8-9, please replace paragraph 21 with the following paragraph:

In certain embodiments, it is desirable to employ a physical means for separating groups or arrays of binding islands or immobilized biomolecules: such physical separation facilitates exposure of different groups or arrays to different solutions of interest. Therefore, in certain embodiments, arrays are situated within wells of 96, 384, 1536, or 3456 microwell plates. In such embodiments, the bottoms of the wells may serve as surfaces for the formation of arrays, or arrays may be formed on other surfaces then placed into wells. In certain embodiments, such where a surface without wells is used, binding islands may be formed or biomolecules may be immobilized on a surface and a gasket or contact mask, having holes spatially arranged so that they correspond to the islands or biomolecules may be placed on the surface. Such a gasket or contact mask is preferably liquid tight. A gasket, or contact mask, may be placed on a surface at any time during the process of making the array and may be removed if separation of groups or arrays is no longer necessary. See, e.g., co-pending U.S. Serial No. 09/705,187, entitled Polymer Gel Contact Masks And Methods And Molds For Making Same. Specifically, a contact mask is placed over a substrate to conceal a portion of the substrate and leave a plurality of discontinuous portions of the substrate exposed. Such a mask has a plurality of holes through it. Each of the holes, together with the portion of the substrate surface which it overlies, forms a cavity. Biological and chemical materials can be deposited into each of the cavities individually. The polymer gel contact masks are gel forming polymers that do not dissolve in liquids with which they form gels because the polymer chains are bound together, such as by covalent bonds as in crosslinking or by extensive physical interactions as in interpenetrating polymer networks. Gel-forming polymers typically are crosslinked polymer networks. Crosslinking between the chains prevents separation of the polymer chains from each other which would lead to dissolution. Preferred gel-formed polymers are hydrogels. The hydrogels are especially well suited for use as contact masks in the patterning of biological materials upon a substrate.

Contact masks are articles elongated in two dimensions relative to the third dimension. Accordingly, they have expansive bottom and top surfaces compared to the side surfaces. Contact masks for patterning biological materials typically have one or more holes extending from the top surface to the bottom surface.